QP Code : **12832**

(2½Hours)   [Total Marks :75

N.B. : (1) **All** questions are **compulsory**.
  (2) **Figures** to the **right** indicate **full** marks.
  (3) Draw a neat labelled **diagram** wherever **necessary**.

1. Explain the following:-
   (a) Non-Competitive enzyme inhibition.
             OR
   (a) Derivation of Line weaver Burk equation and its significance.
   (b) Tranferase and Isomerase.   8
             OR
   (b) Mechanism of enzyme action.   8

2. Describe the following:-
   (a) Classification of chemical messengers.   7
             OR
   (a) Gama-amino butyric acid as a neurtransmitter.   7
   (b) Mode of working of neurotransmitters.   8
             OR
   (b) Acetylcholine as a neurotransmitter.   8

3. Explain the following:-
   (a) Control of blood glucose level as an example of homeostasis.   7
             OR
   (a) Non-shivering thermogenesis.   7
   (b) Acclimation and Acclimatization.   8
             OR
   (b) Ionic-regulation in hypo-osmotic environment.   8

4. Describe the following:-
   (a) Cardiac output.   7
             OR
   (a) Endocrine regulation of male reproductive system.   7
   (b) Endocrine regulation of pregnancy in mammals.   8
             OR
   (b) Myogenic heart.   8

5. Write short notes on:-
   (a) Chemical structure of enzyme.   4
             OR
   (a) Effect of pH on enzyme activity.   4
   (b) Purine ADP.   4
             OR
   (b) Aspartic acid.   4
   (c) Aestivation.   4
             OR
   (c) Behavioural adaptations with reference to terrestrial environment. 4
   (d) Suction pump in open circulation.   3
             OR
   (d) Estrous cycle.   3

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